THE HINDS COLLECTION OF THYSANOPTERA

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About 35 years ago the students of the order Thysanoptera in North America could be counted on one hand. At the time that the late W. E. Hinds published his monograph of the order (1902) he was the leading taxonomist in this group of insects. Following the appearance of this paper an increased interest was shown in the taxonomy of thrips, at least judged by the miscellaneous papers which were published by Franklin (1903-09), Daniel (1904), Shull (1909), D. L. Crawford (1909-10), Back (1912), P. R. Jones (1912), and Morgan (1913-1929), later followed by articles from Treherne (1918-19) and Mason (1922-26). In addition to these workers there were three others who have been the leaders, namely Hood (1908-) and Moulton (1907-), who have been publishing for about 30 years, and Watson, whose papers have appeared since 1913, or 25 years.

In more recent years in the wake of Priesner's monograph on the Thysanoptera of Europe (1926-28), articles by Steinweden (1930-33), Watts (1934-35), Andre (1936), J. C. Crawford (1938) and the writer (1931-) have been published on thrips. At the present time there are known to the writer at least 12 students of this group of insects who are collecting, studying, publishing, or contemplating publishing on North American Thysanoptera. Without a doubt as time goes on there will be more taxonomists in this group. Therefore, anything that can be done to facilitate the work is to be encouraged. This can be done by clearing up the synonymy of the older species and illustrating them by means of improved optical equipment as well as making available for study the types of various scattered collections.

For these reasons, during the past summer the writer visited Amherst, Massachusetts, to study and catalog the Hinds collection, deposited at the Department of Entomology of Massachusetts State College¹. Hinds stated in his monograph (page 80), "Of the new species described in this paper, a complete set of types has been deposited in the Massachusetts Agricultural College;

¹ This study was made possible through the kindness of Prof. C. P. Alexander.

a set of cotypes, so far as they exist, has been deposited in the United States National Museum; a third set of cotypes I have retained for my own use, and the remainder I have also deposited in the Massachusetts Agricultural College."

In correspondence with the writer (December, 1935) Hinds stated that his own collection was lost by fire in 1926. As far as is known to the writer, the specimens sent to Washington, D. C., have been incorporated with those of Pergande, Morgan, and Franklin in the rapidly growing collection of thrips under the direction of the Taxonomic Division of the Bureau of Entomology and Plant Quarantine. In addition to the specimens collected and mounted by Hinds himself, were those he obtained from Franklin, D. L. Crawford, Beach and Hooker. Through the efforts and generosity of J. D. Hood and J. C. Crawford many additional specimens have been added in recent years to the original Amherst collection, which now totals about 95 species. For the benefit of those interested in Thysanoptera and to identify the original Hinds' collection as an important taxonomic entity, a complete list of the specimens is here presented.

The following new species² were described by Hinds:

 $*Aeolothrips\ bicolor$ —6323 Chirothrips crassus—6324 Chirothrips obesus—6325 Limothrips avanæ—6326 Sericothrips cingulatus—6327 *Euthrips fuscus—6328 Euthrips nicotianæ—8434 *Rhaphidothrips fuscipennis—6329 *Heliothrips fasciapennis—6330 Trichothrips ambitus Trichothrips beachi Cephalothrips yuccæ —6331 Phloeothrips uzeli-6332 $*Phloeothrips\ pergandei$ Acanthothrips magnafemoralis Malacothrips zonatus-6333 Eurythrips ampliventralis—6334 Eurythrips osborni-6335 *Cryptothrips aspersus—6336

It is indeed fortunate that all (labelled "cotype" or "meta-

² N. B.: No attempt is made here to discuss the validity of Hinds' species or the synonymy of any species in the collection.

type") but two, Chirothrips obesus and Trichothrips ambitus, are still present. However, it should be noted that the species marked with asterisks above are represented by such badly mutilated or poorly mounted specimens as to render a study of their characters very difficult and in some cases impossible. The numbers refer to the catalog number in the U. S. National Museum. Since T. ambitus was described from a unique female it is the only Hinds species that is lost and unavailable for study.

Other specimens, many of which are types, present in the original collection are listed below:

Anaphothrips longipennis D. L. Crawford Anaphothrips striatus Osborn, homotype Ctenothrips bridwelli Franklin, cotype Euthrips cephalicus D. L. Crawford Euthrips insularis Franklin, paratypes and cotypes Euthrips minutus Moulton Heliothrips rubrocinctus (Giard) Heterothrips decacornia D. L. Crawford Sericothrips variabilis (Beach) homotypes Thrips abdominalis D. L. Crawford Thrips perplexus Beach, homotype Aleurodothrips fasciapennis Franklin, cotype Anthothrips gowdeyi Franklin, paratypes and cotypes Anthothrips niger (Osborn), homotype Anthothrips variabilis D. L. Crawford Cryptothrips fasciapennis Franklin, type Idolothrips angusticeps D. L. Crawford Liothrips bakeri D. L. Crawford Trichothrips niger Franklin, type

An obituary of W. E. Hinds has appeared under the pen of F. L. Thomas (Jour. Econ. Ent., 29:225-226, 1936) and the writer published a note in The Pan-Pacific Entomologist (Vol. 14, page 96) on the chime dedicated to Doctor Hinds.

Of the more than one hundred publications credited to him, as far as is known, he published only three papers on Thysanoptera which are cited below:

- 1900. The grass thrips, Anaphothrips striatus (Osb.), 37th An. Rpt. Mass. Agr. Col., Public Document No. 31, Jan., pages 83-97, 4 plates.
- 1902. Contribution to a monograph of the insects of the order Thysanoptera inhabiting North America. Proc. U. S. Nat'l Museum, 26:79-242 (No. 1310), 11 plates.
- 1905. A new tobacco thrips. Proc. Biol. Soc. Wash., 18:197-200.